

# Ten Week Brood Observations 2005

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## **Abstract**

Ten week brood observations are used as an index to productivity. For gray partridge, ring-necked pheasant, and wild turkey, the number of broods counted per observer in 2005 increased from 2004 levels. However, ruffed grouse broods counted per observer in 2005 decreased from 2004 levels. Participation in the 2005 Ten Week Brood Survey decreased 15% from the 2004 level.

## **Methods**

An e-mail containing an electronic survey form was sent to all department field personnel. Field personnel were asked to record the number of gray partridge, ring-necked pheasant, ruffed grouse, and wild turkey broods observed while doing normal field operations. The survey period began the second week in June and ended the third week of August, 2005. When one of the four species was observed with a brood, participants recorded the date, county of the observation, number of young in the brood, and whether all the young in the brood were counted. A summary form was e-mailed at the end of August to all field personnel. On the summary form, participants reported all brood observations, the percent of their time spent in the field, and whether they or others that worked for them collected the observations. These forms were returned to Wildlife Surveys and the data were entered into the DNR UNIX production server and summarized using the Statistical Analysis System (SAS).

## **Results**

Two hundred and forty one (241) observers sent back 210 surveys, reporting their observations of game broods of gray partridge, ring-necked pheasant, ruffed grouse, and wild turkey in the summer of 2005. The number of observers decreased from 2004 to 2005 by 15%, and the number of surveys returned by these observers decreased by 3% from 2004.

### **Gray Partridge**

Gray partridge observations in 2005 increased to 0.03 broods per observer (Fig 1). Only two gray partridge broods were observed over the ten-week period. The average number of broods observed was below the long-term (1980 - 2004) mean of 0.05. Average 2005 brood size was 4.0 compared to 6.0 in 2004, representing a 33% decrease, although sample size only consists of two broods.

### **Ring-necked Pheasant**

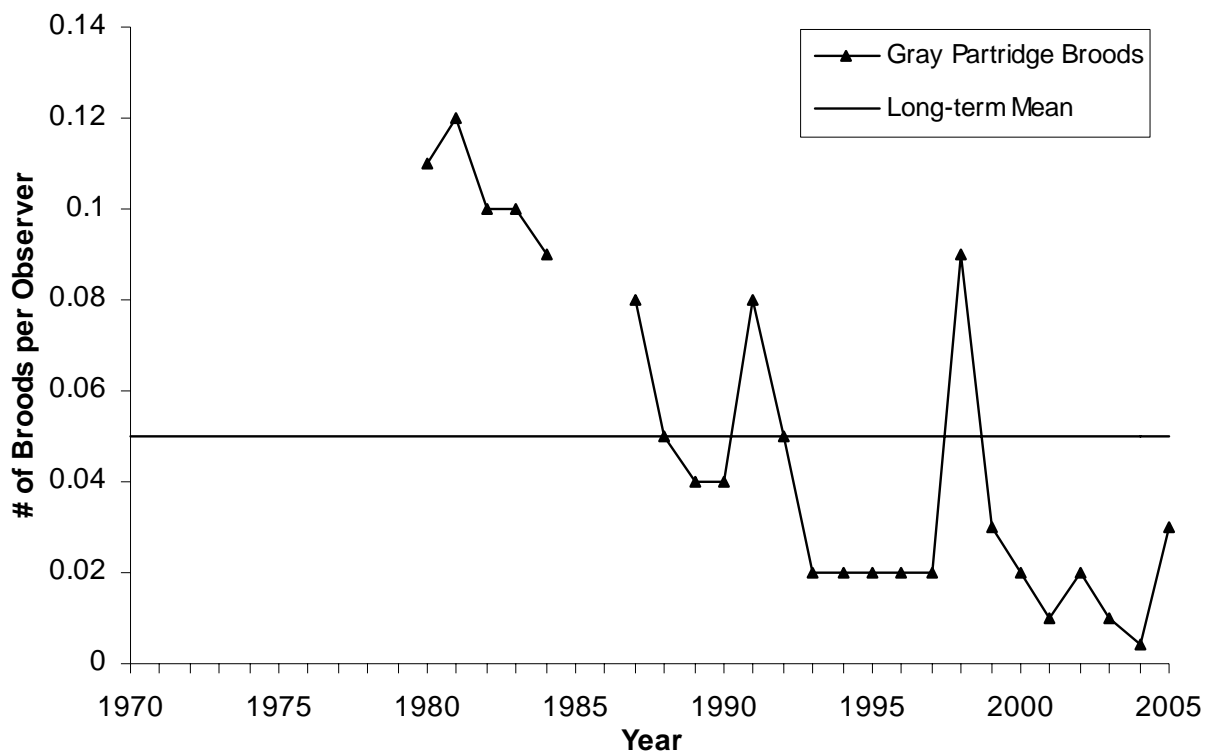
Pheasant observations in 2005 increased to 0.57 broods per observer (Fig. 2). Broods per observer showed an increase of 30% from 2004 when 0.44 broods per observer were recorded. The average number of broods per observer was just above the long-term (1970-2004) mean of 0.52. In 2005, average brood size observed was 5.1 compared to 5.0 in 2004, representing an increase of 2%.

### Ruffed Grouse

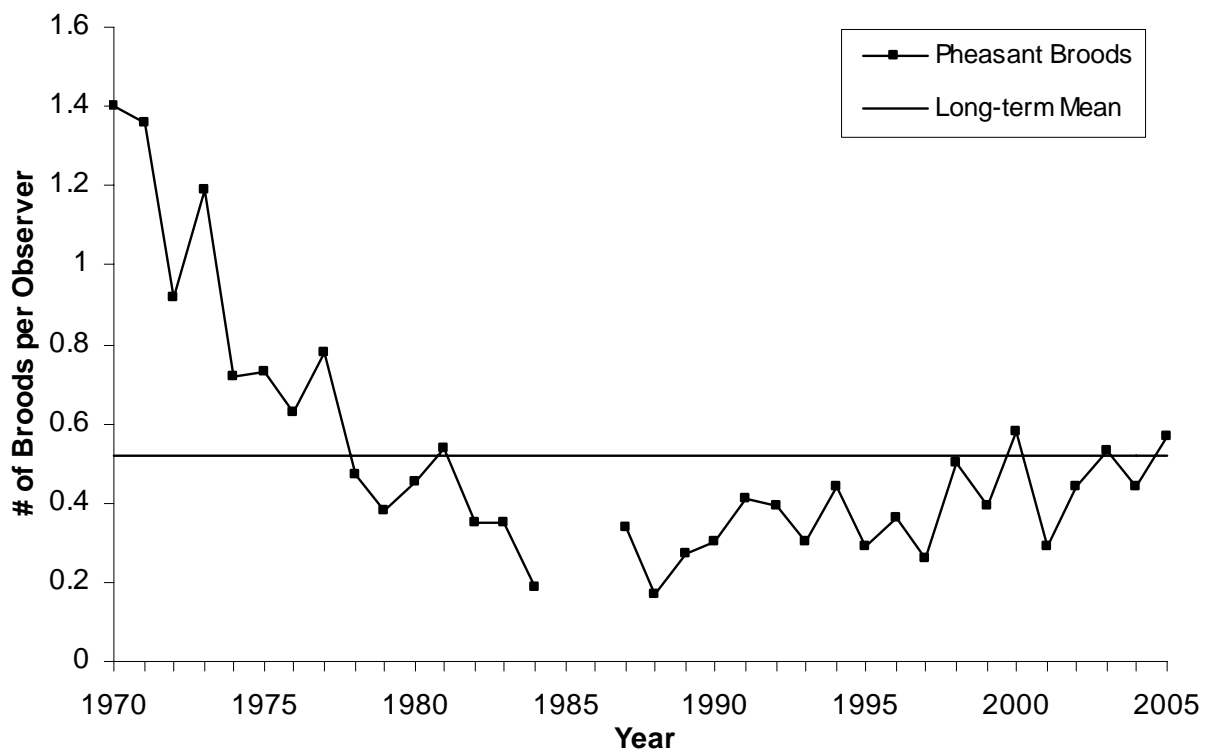
The average number of ruffed grouse broods observed during the ten week period per field participant in 2005 was 0.47 (Fig. 3). Broods per observer decreased 19% from 2004 when 0.58 broods per observer were recorded. The average number of broods observed was below the long-term (1970-2004) mean of 1.37 broods per observer. The number of young observed per brood in 2005 was 4.9 compared to 4.2 in 2004, an increase of 16.7%.

### Wild Turkey

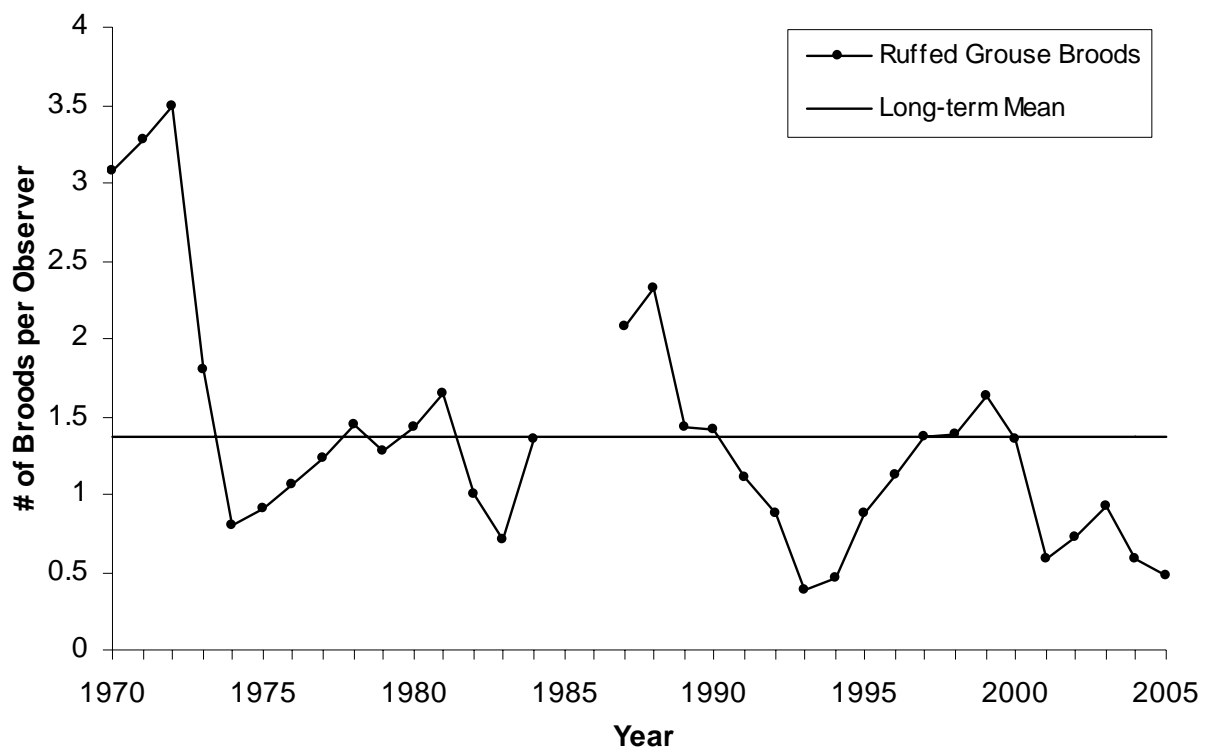
In 2005, the number of wild turkey broods per observer was 3.14 (Fig 4). Broods per observer increased 54%, and was well above the long-term (1987-2004) mean of 1.24 broods per observer. The average 2005 brood size was 5.1 compared to 4.3 in 2004, an increase of 18.6%.



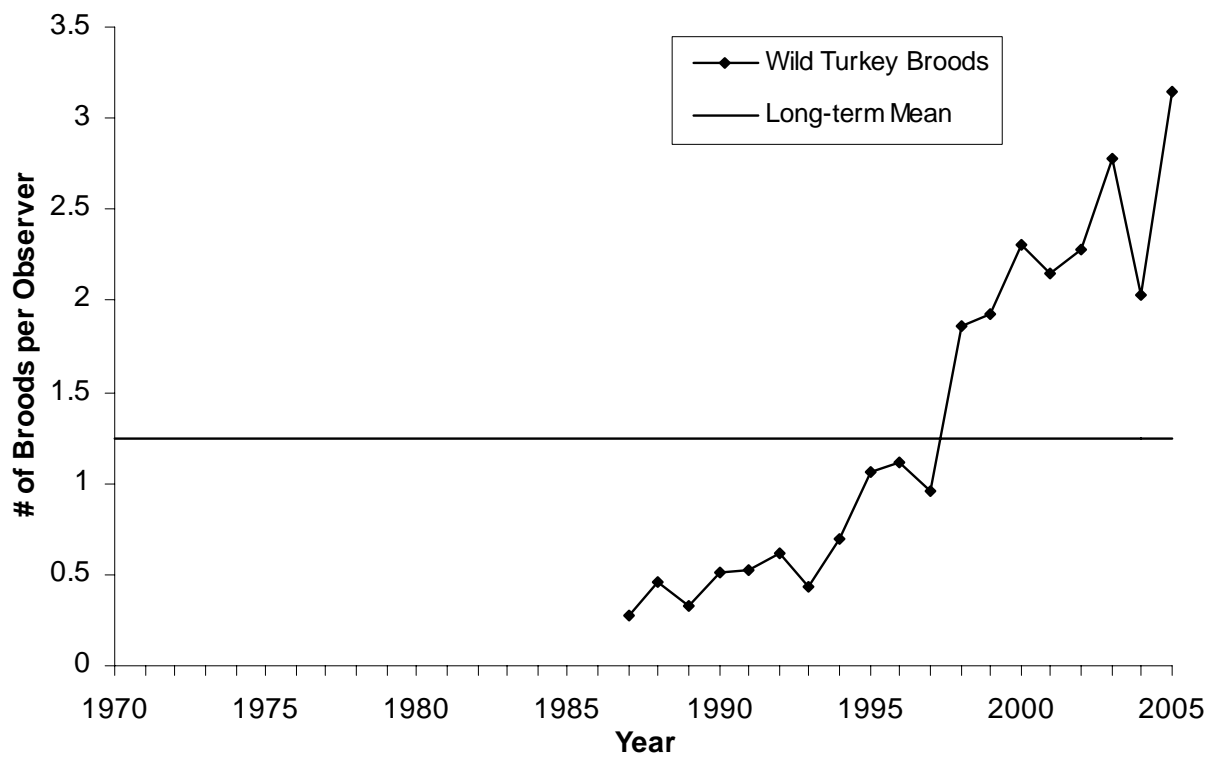
**Figure 1.** Number of gray partridge broods per observer 1980-2005.



**Figure 2.** Number of ring-necked pheasant broods seen per observer 1970-2005.



**Figure 3.** Number of ruffed grouse broods seen per observer 1970-2005.



**Figure 4.** Number of wild turkey broods seen per observer 1987-2005.